



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/577,225

07/10/2006

Keiji Katata

8048-1158

3415

466 7590 12/20/2010

YOUNG & THOMPSON  
209 Madison Street  
Suite 500  
Alexandria, VA 22314

EXAMINER

SHEN, KEZHEN

ART UNIT

PAPER NUMBER

2627

NOTIFICATION DATE

DELIVERY MODE

12/20/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/577,225	<b>Applicant(s)</b> KATATA ET AL.	
	<b>Examiner</b> KEZHEN SHEN	<b>Art Unit</b> 2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 24-26,28,30-36,38,39 and 41-67 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-26,28,30-36,38,39 and 41-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 24-26, 28, 30-36, 38-39 and 41-53 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claim 24, 32, 42-53, applicant has amended the claim to further define an update area, whose position is variable. The examiner, upon further consideration, has determined the claims to still be rejected in view of Takahashi et al. Suzuki teaches the update area, however fails to teach the position to be variable. Takahashi et al. teaches a variable anchor identifier dependent on the number of defect position information in the defect list (Figs. 6-8 [0232] - [0252] the 2<sup>nd</sup> update times information is variable). Therefore, in view of this teaching and the benefit of updating a defect list the limitation of an update area whose position is variable is rejected in view of the prior arts.

Regarding claims 54 and 67, the applicant has added the claims to further narrow the limitation to specific physical addresses of the four anchor areas. The rejections for those claims are as follows below.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

Art Unit: 2627

said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24-26, 28, 30-36, 38-39 and 41-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki US 2003/0059205 A1, and further in view of Ito et al. US 2003/0137909 A1, Takahashi et al. US 2003/0179669 A1 and Mitsuda et al. US 2003/0193859 A1.

Regarding claim 24, Suzuki teaches an information recording medium, comprising: an anchor area which is to record therein anchor information which is referred to in reading file system information for controlling at least one of recording and reproduction of the record information ([0041] [0042] [0046]); and an update area, to update-record therein the anchor information ([0049]) after a recording of a border area is finished, wherein the border area (i) is a recording unit by which the record information is alternately recorded ([0047]-[0049]). Suzuki fails to teach a dual recording layer in which record information can be alternately recorded in an opposite track path manner, after a recording of a border area is finished, wherein the border area includes a first area portion in the first recording layer and a second area portion in the second recording layer whose radius position is substantially same as that of the first area portion, at least one of said first recording layer and said second recording layer comprises a pointer recording area to record therein four update block sector pointers each of which indicates an address value of the update area in which the anchor information is update-recorded, at least one of said first recording layer and said second layer comprises a flag area to record therein four update block sector effective flags each of which corresponds to respective one of the update block sector pointers and

Art Unit: 2627

each of which indicates whether or not the anchor information is update-recorded into the update area and which update area is different from the anchor area and whose position is variable.

However, in the same field of endeavor, Ito et al. teach a dual layer disc and the recording path to be in an opposite track path (Fig. 4C, [0009] opposite track arrangement). wherein the border area includes a first area portion in the first recording layer and a second area portion in the second recording layer whose radius position is substantially same as that of the first area portion (12 of Fig. 6, [0072], [0074] defect management region), at least one of said first recording layer and said second recording layer comprises a pointer recording area (20 of Fig. 6, [0072] DDS), at least one of said first recording layer and said second layer comprises a flag area (20 of Fig. 6, [0072] DDS). Therefore, one of ordinary skill in the art would have found it obvious to combine the teachings of the anchor area and update area as taught by Suzuki with the teachings of a dual layer disc and recording the disc in a opposite track path manner as taught by Ito et al. for the purpose of including anchor area update area on a dual layer disc, opposite track path and recording data on a first and second recording layer with flag area for the benefit of increasing data density on the disc (Ito et al. [0004]). Suzuki with Ito et al. still fail to teach an update area which is different from the anchor area, to record therein four update block sector pointers each of which indicates an address value of the update area in which the anchor information is update-recorded and the flag area to record therein four update block sector effective flags each of which

Art Unit: 2627

corresponds to respective one of the update block sector pointers and each of which indicates whether or not the anchor information is update-recorded into the update area.

However, in the same field of endeavor, Takahashi et al. teach a system of an anchor to a defect list which identifies defects in the disc along with a first and second update times information representing the number of times which a defect list has been updated and for updating the latest defect entry which is included in the anchor (133, 126 and 152 of Fig. 1, Fig. 5, [0065], [0081], [0084], [0087], [0089]), and to record therein four update block sector pointers each of which indicates an address value of the update area in which the anchor information is update-recorded (104, 105, 108, 109, 126 and 151 of Fig. 1, [0119], [0130] anchor identifier) and the flag area to record therein four update block sector effective flags each of which corresponds to respective one of the update block sector pointers (133 and 152 of Fig. 1, [0130], first and second update times information) and each of which indicates whether or not the anchor information is update-recorded into the update area ([0125], S402 and S403 of Fig. 4, [0182] – [0183] anchor information is determined to be matched and updated). Further, Takahashi et al. teach a method of updating the position of a second update times information which allows the flag area to move depending on the number of defective entries (Figs. 6-8 [0232] - [0252] the 2<sup>nd</sup> update times information is variable). Takahashi et al. teach this system to overcome the problem of updating accurately when large amounts of information on a disc, such as the double layer disc presented by applicants, become harder to manage ([0027] – [0045]). Therefore, it would have obvious to one of ordinary skill in the art to combine the teachings of information

Art Unit: 2627

recording medium as taught by Suzuki with Applicants' admitted prior art with the teachings of two updates lists both used to updated defect list information, record block sector pointers, a flag area and an update whose position is variable as taught by Takahashi et al. as a whole for the purpose of including two update lists which are on different areas on the disc used to update the anchor information and address and flag information for the benefit updating accurate information on the disc and allow proper user data reproduction (Takahashi et al., Fig. 10, [0309] – [0316]).

Further, Mitsuda et al. teaches an update flag to indicate an update in a managing area (Fig. 3, [0026], [0028] – [0035]). Therefore, one of ordinary skill in the art would have found it obvious to combine the teachings of the anchor area and update area as taught by Suzuki, Takahashi et al. and Ito et al. with teachings of an update flag area to indicate an anchor information update as taught by Mitsuda et al. for the benefit of managing update data of the recording medium.

Regarding claim 25, Suzuki teaches the information recording medium according to claim 24, wherein the update area is included in a user area to record therein the record information (Figs. 2A-2D, the anchor is inside the data area, [0047]-[0049]).

Regarding claim 26, Suzuki teaches the information recording medium according to claim 24, wherein the update area is included in a border management area to manage the border area ([0047]-[0049]).

Regarding claim 28, Suzuki teaches the information recording medium according to claim 27, wherein the pointer recording area is included in a recording management

area to manage the recording of the record information (Figs. 2A-2D, [0047] and [0050] the addresses of the anchor is located within the designated area).

Regarding claim 30, Suzuki fails to teach the information recording medium according to claim 24, wherein the flag area is included in a border management area to manage the border area.

However, Mitsuda et al. teach to include the flag area within a management area (12 and 13 of Fig. 2, [0025] – [0026]). Therefore, one of ordinary skill in the art would have found it obvious to combine the teachings of the anchor area and update area as taught by Suzuki with teachings of an update flag area to be within a management area as taught by Mitsuda et al. for the benefit of managing update data of the recording medium.

Regarding claim 31, Suzuki teaches the information recording medium according to claim 24, further comprising a position information recording area to record therein position information which indicates a position of the anchor area ([0042] [0049] the anchor address is fixed in a specific location which is read when reproducing the information recording medium).

Regarding claim 32, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 24. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium (8 of Fig. 1, [0047]).



Regarding claim 33, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 25. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium (8 of Fig. 1, [0047]). Miscellaneous

Regarding claim 34, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 26. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium ([0047] – [0049]).

Regarding claim 35, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 26.

Regarding claim 36, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 26.

Regarding claim 38, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 28.

Regarding claim 39, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 27.

Regarding claim 41, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 30.

Regarding claim 42, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 24. Further Suzuki teaches a controller which

Art Unit: 2627

controls the anchor and update of the information recording medium (8 of Fig. 1, [0047]).

Regarding claim 43, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 24. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium (8 of Fig. 1, [0047]) and a reading device for reading the system information (3 and 4 of Fig. 1, [0038] - [0039]).

Regarding claim 44, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 24. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium (8 of Fig. 1, [0047]) and a reading device for reading the system information (3 and 4 of Fig. 1, [0038] - [0039]).

Regarding claim 45, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 24. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium (8 of Fig. 1, [0047]), a reading device for reading the system information (3 and 4 of Fig. 1, [0038] - [0039]) and a reproduction device (9 of Fig. 1, [0038] - [0039]).

Regarding claim 46, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 24. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium (8 of Fig. 1,

Art Unit: 2627

[0047]), a reading device for reading the system information (3 and 4 of Fig. 1, [0038] - [0039]) and a reproduction device (9 of Fig. 1, [0038] - [0039]).

Regarding claim 47, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 24. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium (8 of Fig. 1, [0047]), a reading device for reading the system information (3 and 4 of Fig. 1, [0038] - [0039]).

Regarding claim 48, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 24. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium (8 of Fig. 1, [0047]), a reading device for reading the system information (3 and 4 of Fig. 1, [0038] - [0039]) and a reproduction device (9 of Fig. 1, [0038] - [0039]).

Regarding claim 49, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 24. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium (8 of Fig. 1, [0047]), a reading device for reading the system information (3 and 4 of Fig. 1, [0038] - [0039]) and a reproduction device (9 of Fig. 1, [0038] - [0039]).

Regarding claim 50, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 24. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium (8 of Fig. 1,

[0047]), a reading device for reading the system information (3 and 4 of Fig. 1, [0038] - [0039]) and a reproduction device (9 of Fig. 1, [0038] - [0039]).

Regarding claim 51, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 24. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium (8 of Fig. 1, [0047]), a reading device for reading the system information (3 and 4 of Fig. 1, [0038] - [0039]) and a reproduction device (9 of Fig. 1, [0038] - [0039]).

Regarding claim 52, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 24. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium (8 of Fig. 1, [0047]), a reading device for reading the system information (3 and 4 of Fig. 1, [0038] - [0039]) and a reproduction device (9 of Fig. 1, [0038] - [0039]).

Regarding claim 53, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 24. Further Suzuki teaches a controller which controls the anchor and update of the information recording medium (8 of Fig. 1, [0047]), a reading device for reading the system information (3 and 4 of Fig. 1, [0038] - [0039]) and a reproduction device (9 of Fig. 1, [0038] - [0039]).

Regarding claim 54, Suzuki teaches the information recording medium according to claim 24, wherein at least at least one of said first recording layer and said second recording layer comprises: a LRA (Last Recorded Address) and the "LRA" is variable (S47 - S49 of Fig. 9, [0081] - [0082]. Suzuki, Ito et al., Takahashi et al. and Mitsuda et

Art Unit: 2627

al. all fail to teach four anchor areas which include (i) an area whose logical block address is "16h", (ii) an area whose logical block address is "256h", (iii) an area whose logical block address is "LRA (Last Recorded Address) - 256h" and (iv) an area whose logical block address is "LRA",

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made since it is considered that it is not inventive to discover the optimum or workable ranges by routine experimentation in the absence of criticality. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)

The examiner has searched through the specification, but did not discover any critical element for positioning the anchor points at the specified location which wouldn't have been obvious to one of ordinary skill in the art.

Regarding claim 53, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 54, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 55, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 56, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 57, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 58, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 59, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 60, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 61, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 62, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 63, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 64, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 65, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 66, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

Regarding claim 67, the limitations have been analyzed and rejected with respect to the rejection as set forth above in claim 54.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEZHEN SHEN whose telephone number is (571)270-1815. The examiner can normally be reached on 10am-6pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571)272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kezhen Shen/  
Examiner, Art Unit 2627

/Joseph H. Feild/  
Supervisory Patent Examiner, Art  
Unit 2627